REPLACEMENT SHEET
Drawing Sheet 1 of 19
Title: INTEGRATED DEVELOPMENT ENVIRONMENT FOR JAVA MESSAGE SERVICE MARK-UP LANGUAGE
Inventors: Kathiravan Sengodan
Application No.: 10/602,038   Filing Date: June 23, 2003
Docket No.:   BEAS-01351US4
Attorney: Karl F. Kenna   Telephone No. (415) 362-3800
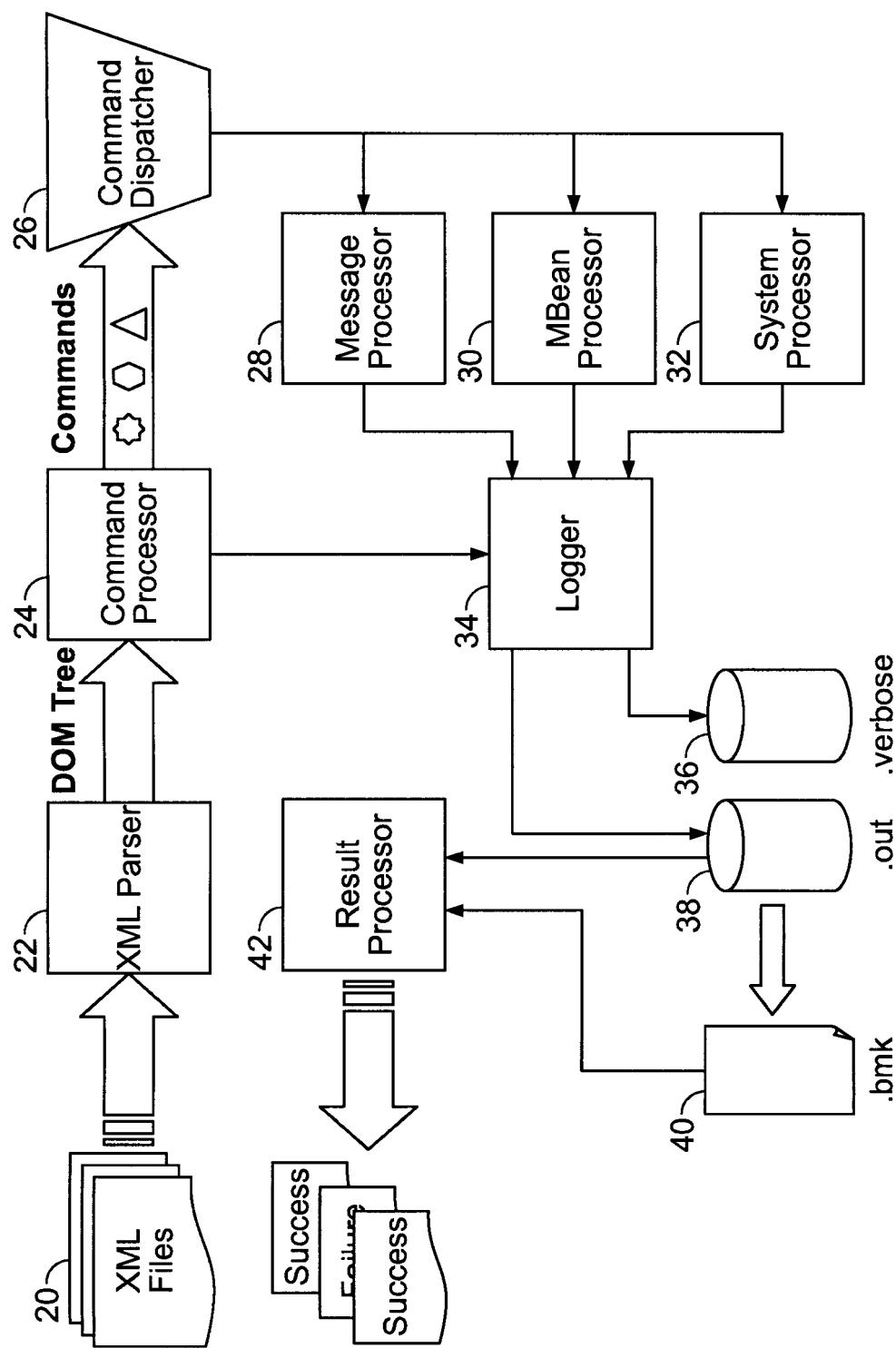
FIG. 1

REPLACEMENT SHEET
Drawing Sheet 2 of 19
Title: INTEGRATED DEVELOPMENT ENVIRONMENT FOR JAVA MESSAGE SERVICE MARK-UP LANGUAGE
Inventors: Kathiravan Sengodan
Application No.: 10/602,038   Filing Date: June 23, 2003
Docket No.: BEAS-01351US4
Attorney: Karl F. Kenna   Telephone No. (415) 362-3800

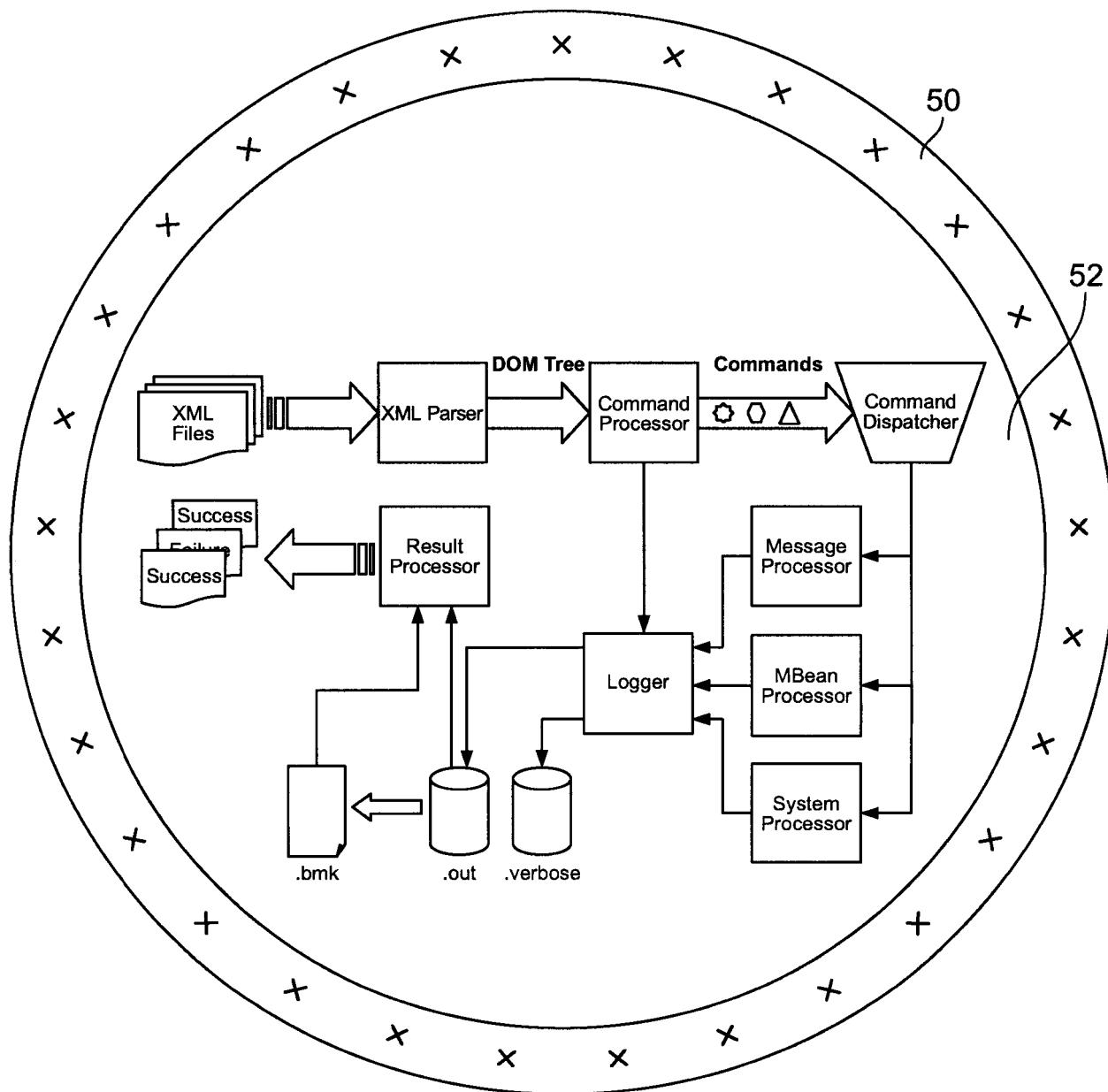**FIG. 2**

REPLACEMENT SHEET
Drawing Sheet 3 of 19
Title: INTEGRATED DEVELOPMENT ENVIRONMENT FOR JAVA MESSAGE SERVICE MARK-UP LANGUAGE
Inventors: Kathiravan Sengodan
Application No.: 10/602,038   Filing Date: June 23, 2003
Docket No.: BEAS-01351US4
Attorney: Karl F. Kenna   Telephone No. (415) 362-3800

FIG. 3

FIG. 4

REPLACEMENT SHEET
Drawing Sheet 5 of 19
Title: INTEGRATED DEVELOPMENT ENVIRONMENT FOR JAVA MESSAGE SERVICE MARK-UP LANGUAGE
Inventors: Kathiravan Sengodan
Application No.: 10/602,038   Filing Date: June 23, 2003
Docket No.: BEAS-01351US4
Attorney: Karl F. Kenna   Telephone No. (415) 362-3800

FIG. 5

REPLACEMENT SHEET
Drawing Sheet 6 of 19
Title: INTEGRATED DEVELOPMENT ENVIRONMENT FOR JAVA MESSAGE SERVICE MARK-UP LANGUAGE
Inventors: Kathiravan Sengodan
Application No.: 10/602,038   Filing Date: June 23, 2003
Docket No.: BEAS-01351US4
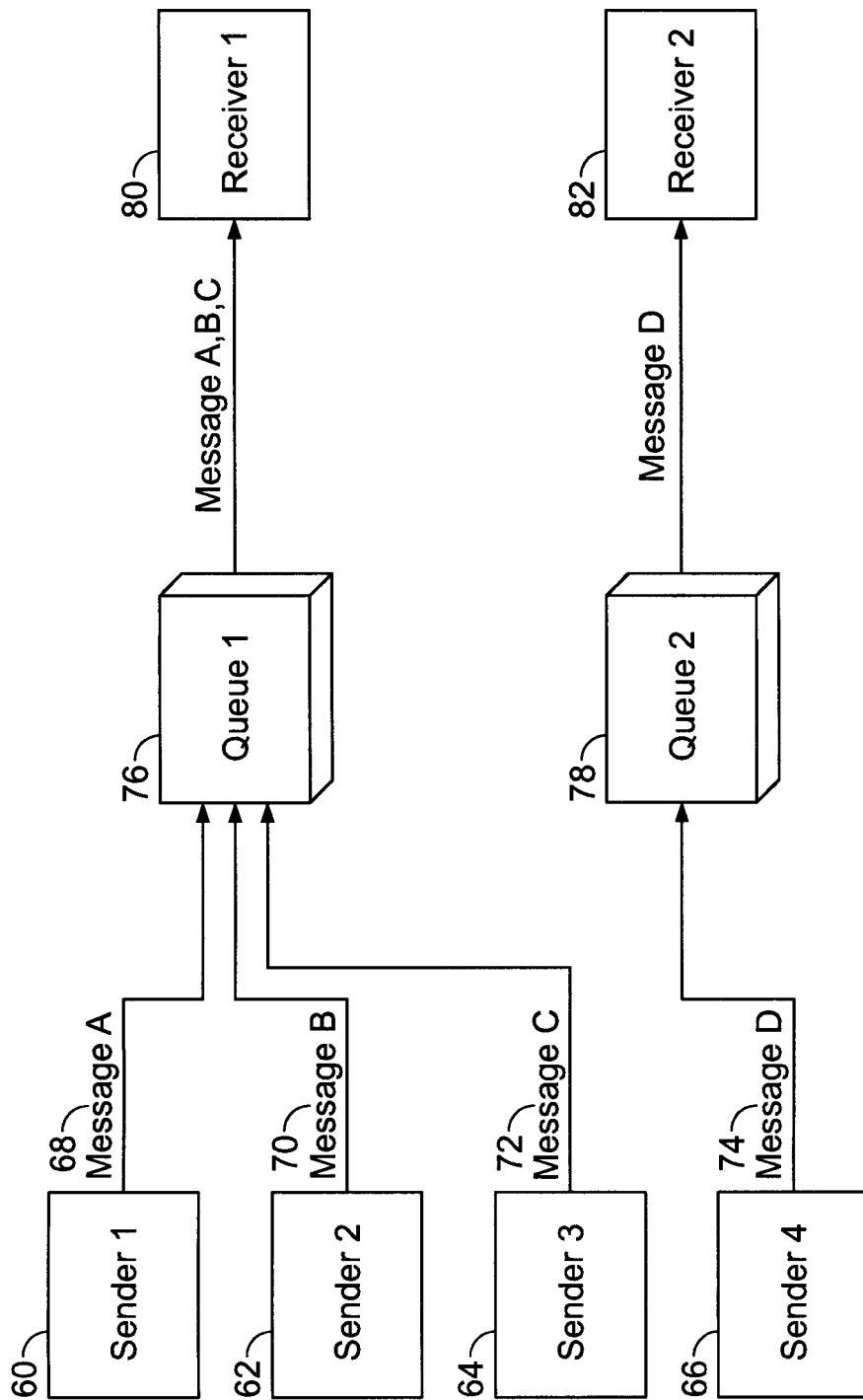Attorney: Karl F. Kenna   Telephone No. (415) 362-3800

140 —

Existing Source File(s)

142 —

Manual User Script Input

144 —

IDE Source Window

146 —

IDE Design Window

148 —

JMSML Operation Tree

150 —

JMSML Engine

152 —

Verbose Log Results

154 —

Error Log Results

156 —

Output Log Results

FIG. 6

REPLACEMENT SHEET
Drawing Sheet 7 of 19
Title: INTEGRATED DEVELOPMENT ENVIRONMENT FOR JAVA MESSAGE SERVICE MARK-UP LANGUAGE
Inventors: Kathiravan Sengodan
Application No.: 10/602,038   Filing Date: June 23, 2003
Docket No.: BEAS-01351US4
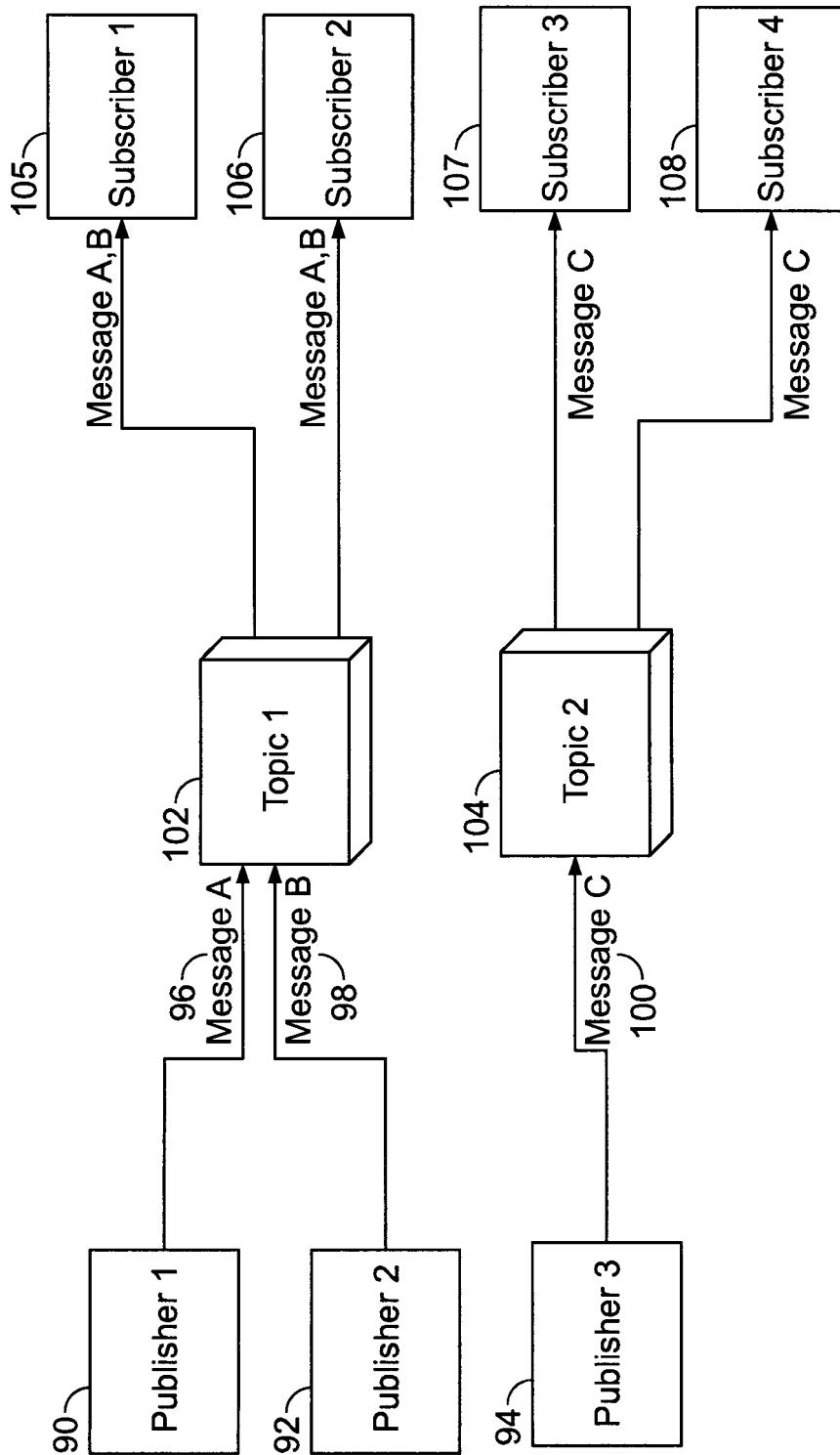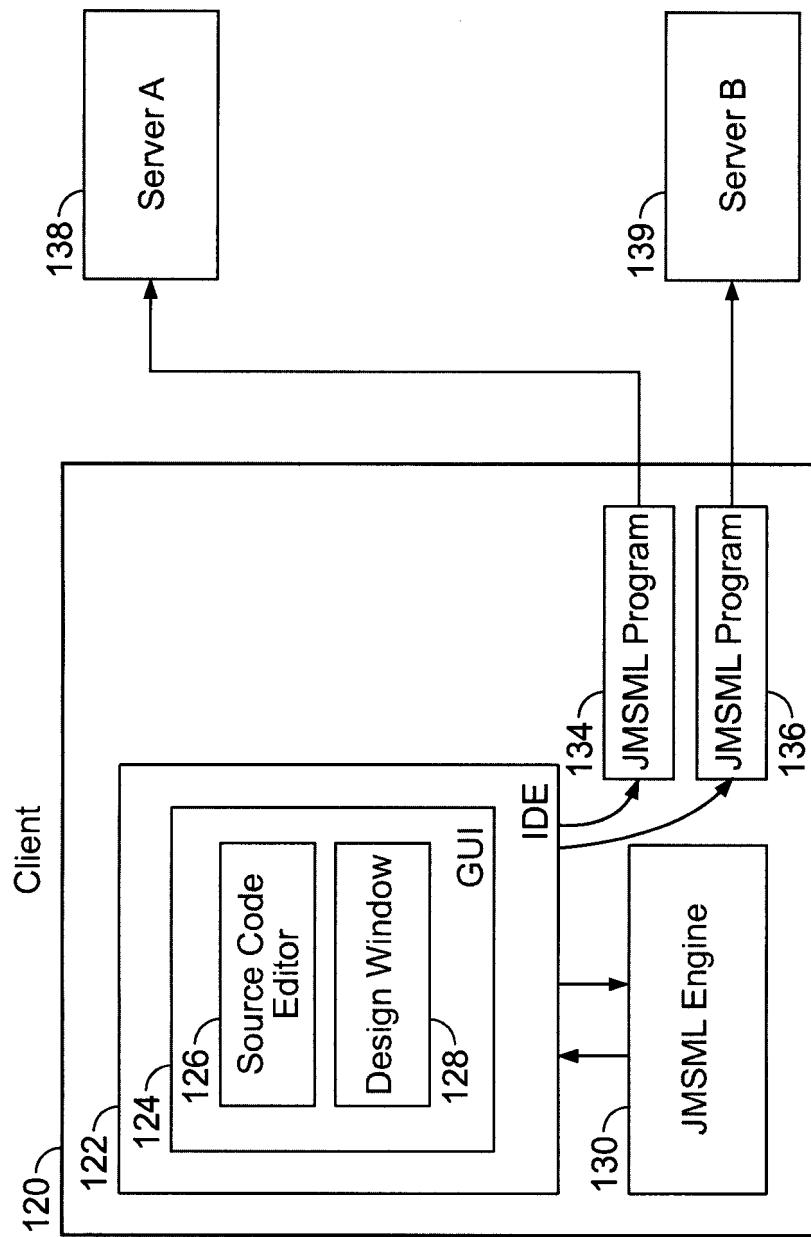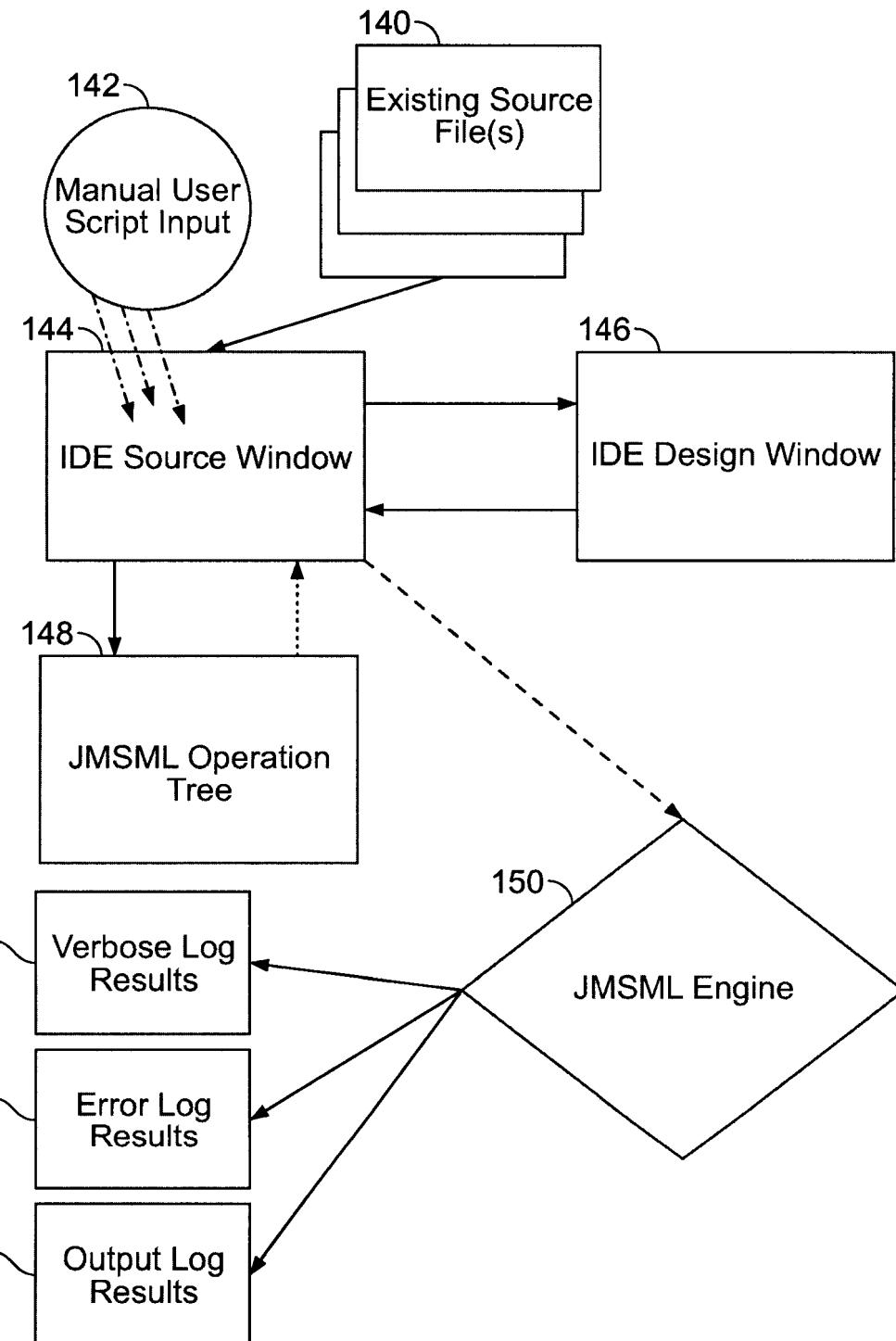Attorney: Karl F. Kenna   Telephone No. (415) 362-3800

JMSML -C:\jmsml\jmstest.xml

File   Edit   Search   Project   Run   Help

200

JTree
colors
sports
food

[jmsml: null]
[scenario: null]
[purpose: null]
[expectedresult: null]
[#comment: <operation Class="mbean"
[operation: null]
[#text: Add]
[operation: null]
[operation: null]
[operation: null]
[operation: null]
[#text: List]
[operation: null]
[operation: null]
[#text: Send]
[operation: null]
[#text: Receive]
[operation: null]
[#text: Remove]
[operation: null]
[operation: null]
[#comment: <operation Class="mbean"

202

```
<?xml version="1.0" encoding="UTF-8"?>
<!DOCTYPE jmsml PUBLIC "-//BEA Systems Inc//DTD JMSML Specification 1.0 JMSML//EN" "jmsml.dtd">

<jmsml>
  <scenario Name="Dynamic Queue creation" Verify="false">
    <purpose>
      To test the dynamic creation of queue
    </purpose>
    <expectedresult>
      JMS queue destination should be successfully created with the specified attributes. In order to verify th
are two additional operations are done as below.

1. Take the statistics information of the JMSServer "Warehouse" before and after the creation of the queue destin
see the newly created queue is been added the current destination count of the JMSServer "Warehouse".

2. A sender and receiver will be created to send and receive a text message to and from the newly created "order

If the above two operations are successful, the test is declared as PASSED. Otherwise the test is declared as FA
    </expectedresult>
    <operation Class="mbean" Name="Warehouse" Targets="examplesServer" Type="JMSServer">
      Add
    </operation>
    <operation Class="mbean" Name="Warehouse" Type="JMSServer">
```

206

jmstest.xml   Source | Design | Line 1   Col 1   Opened   INS

214   216

JMSServer : Warehouse was added to server : examplesServer !
Error adding JMSServer : Warehouse
Exception: com.bea.jmsml.engine.JMSMLException: weblogic.management.MBeanCreationException: - with nested exception:
[javax.management.InstanceAlreadyExistsException: examples:Name=Warehouse,Type=JMSServer]
Flushing out and closing files
Name   = Warehouse
Targets[0]   = examplesServer
BytesMaximum   = -1
BytesThresholdHigh   = -1
BytesThresholdLow   = -1
MessagesMaximum   = -1
MessagesThresholdHigh   = -1
MessagesThresholdLow   = -1
BytesPagingEnabled   = false
MessagesPagingEnabled   = false
- - - - - - - - - - - - - - - - - -
Name   = Warehouse

Output | Error | Verbose

Opened C:\jmsml\jmstest.xml

208

204

210

212

FIG. 7

REPLACEMENT SHEET
Drawing Sheet 8 of 19
Title: INTEGRATED DEVELOPMENT ENVIRONMENT FOR JAVA MESSAGE SERVICE MARK-UP LANGUAGE
Inventors: Kathiravan Sengodan
Application No.: 10/602,038   Filing Date: June 23, 2003
Docket No.: BEAS-01351US4
Attorney: Karl F. Kenna   Telephone No. (415) 362-3800

JMSML -C:\jmsml\jmstest.xml

File   Edit   Search   Project   Run   Help

252

JTree
colors
sports
food

230

[jmsml: null]
[scenario: null]
[purpose: null]
[expectedresult: null]
[#comment: <operation Class="mbean"
[operation: null]
[#text: Add]
[operation: null]
[#text: List]
[operation: null]
[#text: List]
[operation: null]
[#text: List]
[operation: null]
[#text: Add]
[operation: null]
[#text: List]
[operation: null]
[operation: null]
[operation: null]
[operation: null]
[operation: null]
[operation: null]
[#comment: <operation Class="mbean"

232

okToAbandon () : DIRTY FLAG => flase

236 238 240

Output Error Verbose

234

Opened C:\jmsml\jmstest.xml

JMX JMS Messages

254 256

Add Add Add Add Add
CC   SSP Dest FE   BE

259 260 262 264 266

Add

① ————→

JMSServer-
Warehouse

② List

Add

③

JMSQueue-
orderqueue

Source   Design

242 244

258

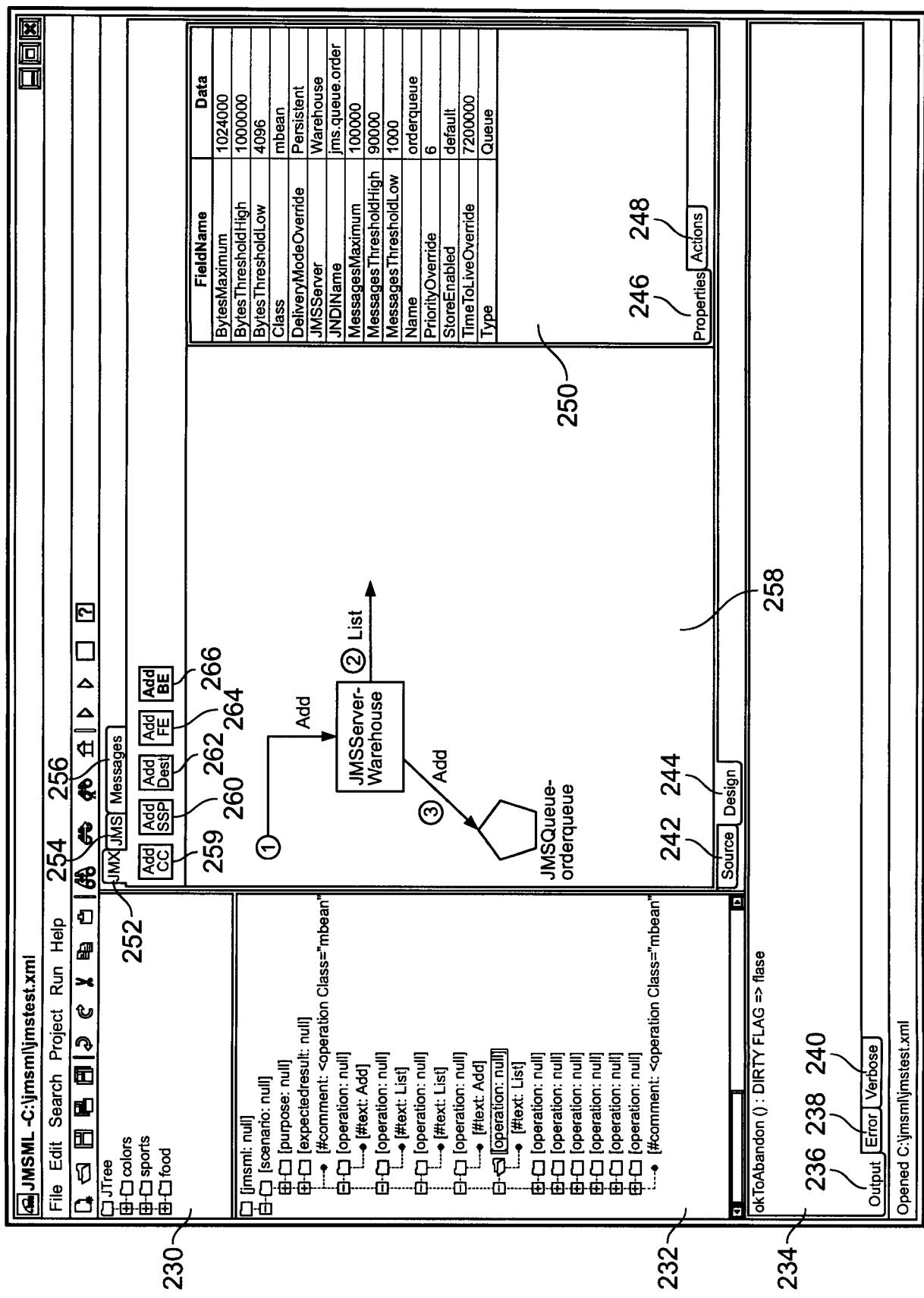| FieldName	Data
BytesMaximum	1024000
BytesThresholdHigh	1000000
BytesThresholdLow	4096
Class	mbean
DeliveryModeOverride	Persistent
JMSServer	Warehouse
JNDIName	jms.queue.order
MessagesMaximum	100000
MessagesThresholdHigh	90000
MessagesThresholdLow	1000
Name	orderqueue
PriorityOverride	6
StoreEnabled	default
TimeToLiveOverride	7200000
Type	Queue

Properties Actions

246 248

250

FIG. 8

REPLACEMENT SHEET
Drawing Sheet 9 of 19
Title: INTEGRATED DEVELOPMENT ENVIRONMENT FOR JAVA MESSAGE SERVICE MARK-UP LANGUAGE
Inventors: Kathiravan Sengodan
Application No.: 10/602,038   Filing Date: June 23, 2003
Docket No.:   BEAS-01351US4
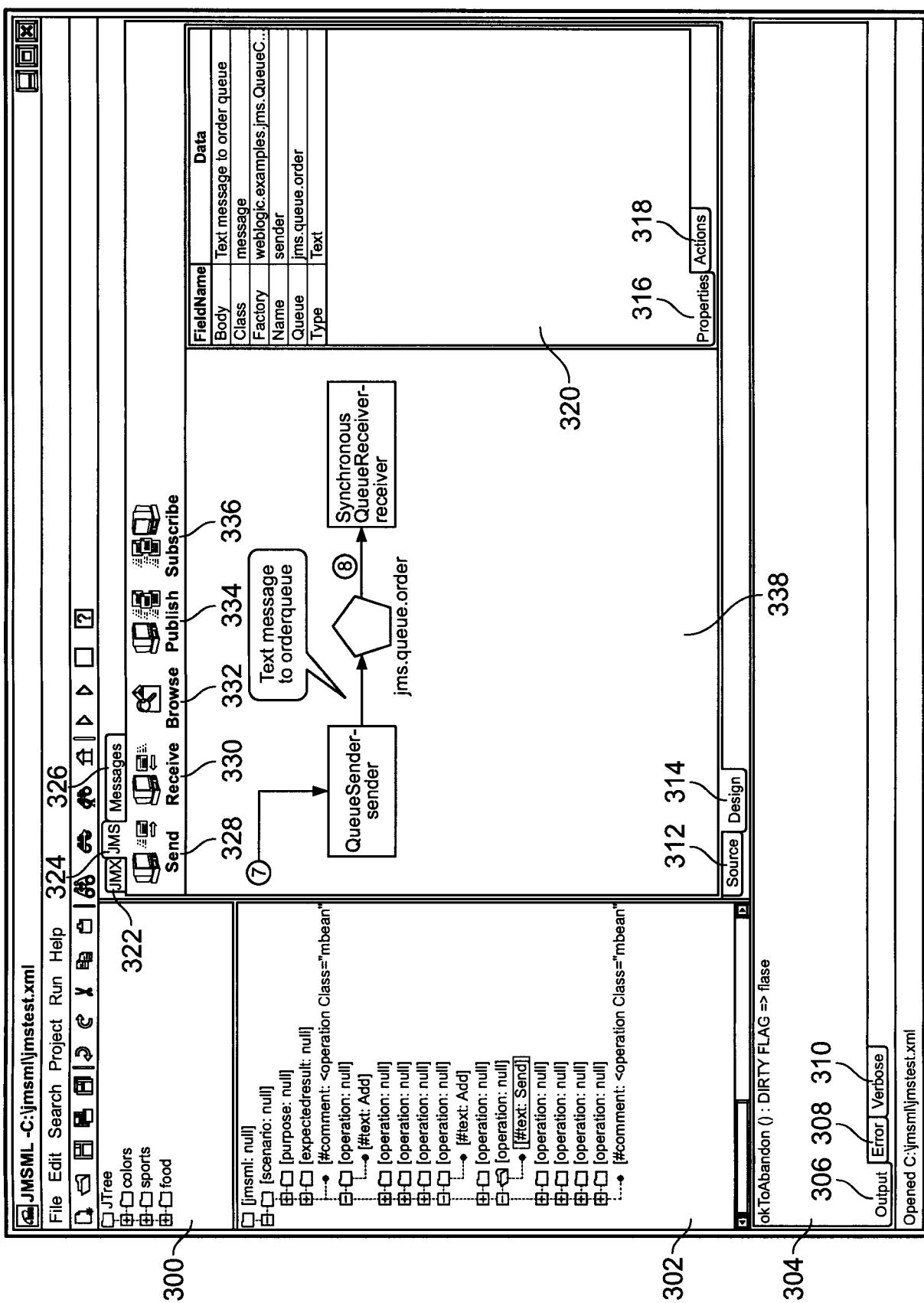Attorney: Karl F. Kenna   Telephone No. (415) 362-3800

FIG. 9

REPLACEMENT SHEET
Drawing Sheet 10 of 19
Title: INTEGRATED DEVELOPMENT ENVIRONMENT FOR JAVA MESSAGE SERVICE MARK-UP LANGUAGE
Inventors: Kathiravan Sengodan
Application No.: 10/602,038   Filing Date: June 23, 2003
Docket No.: BEAS-01351US4
Attorney: Karl F. Kenna   Telephone No. (415) 362-3800
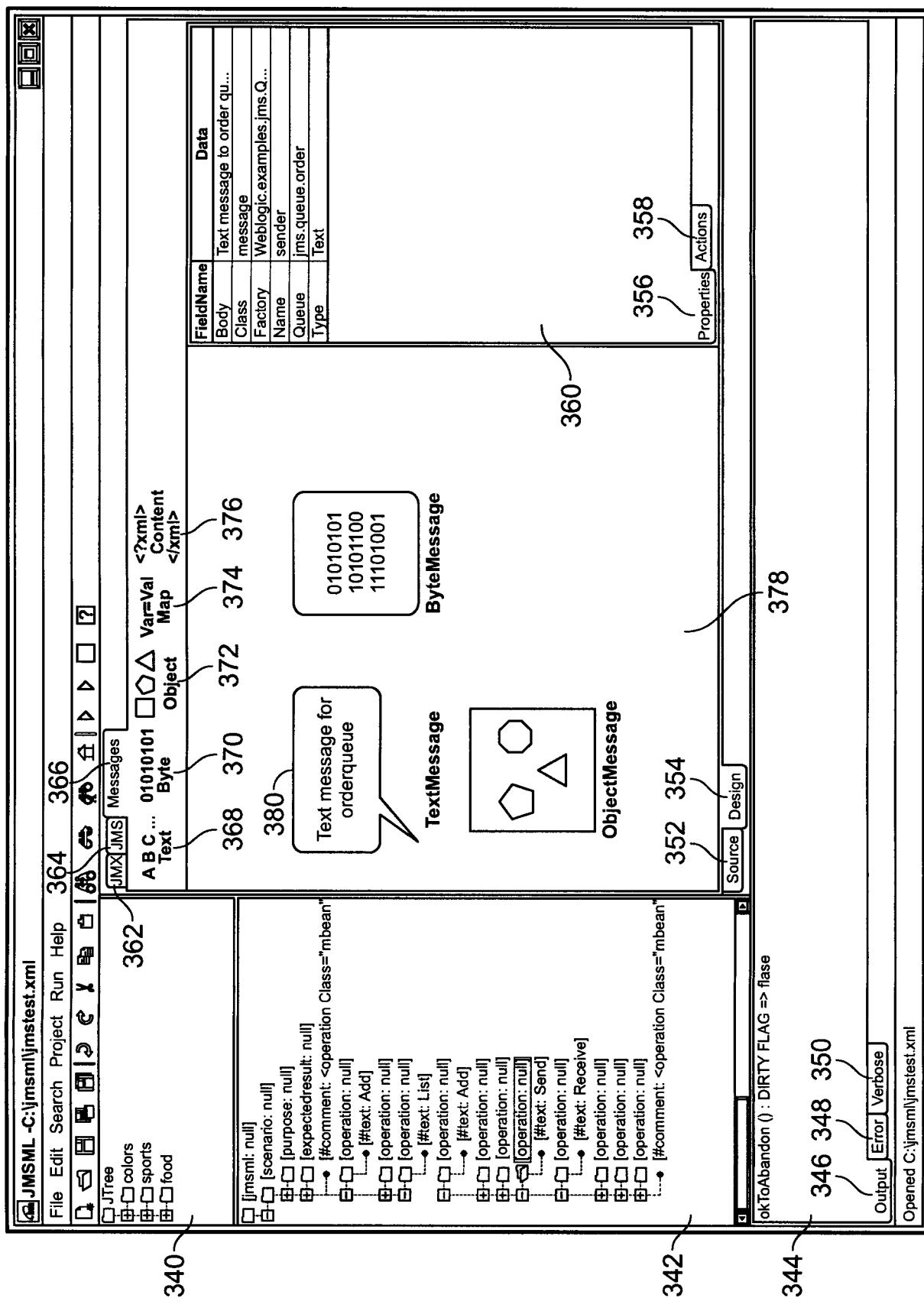
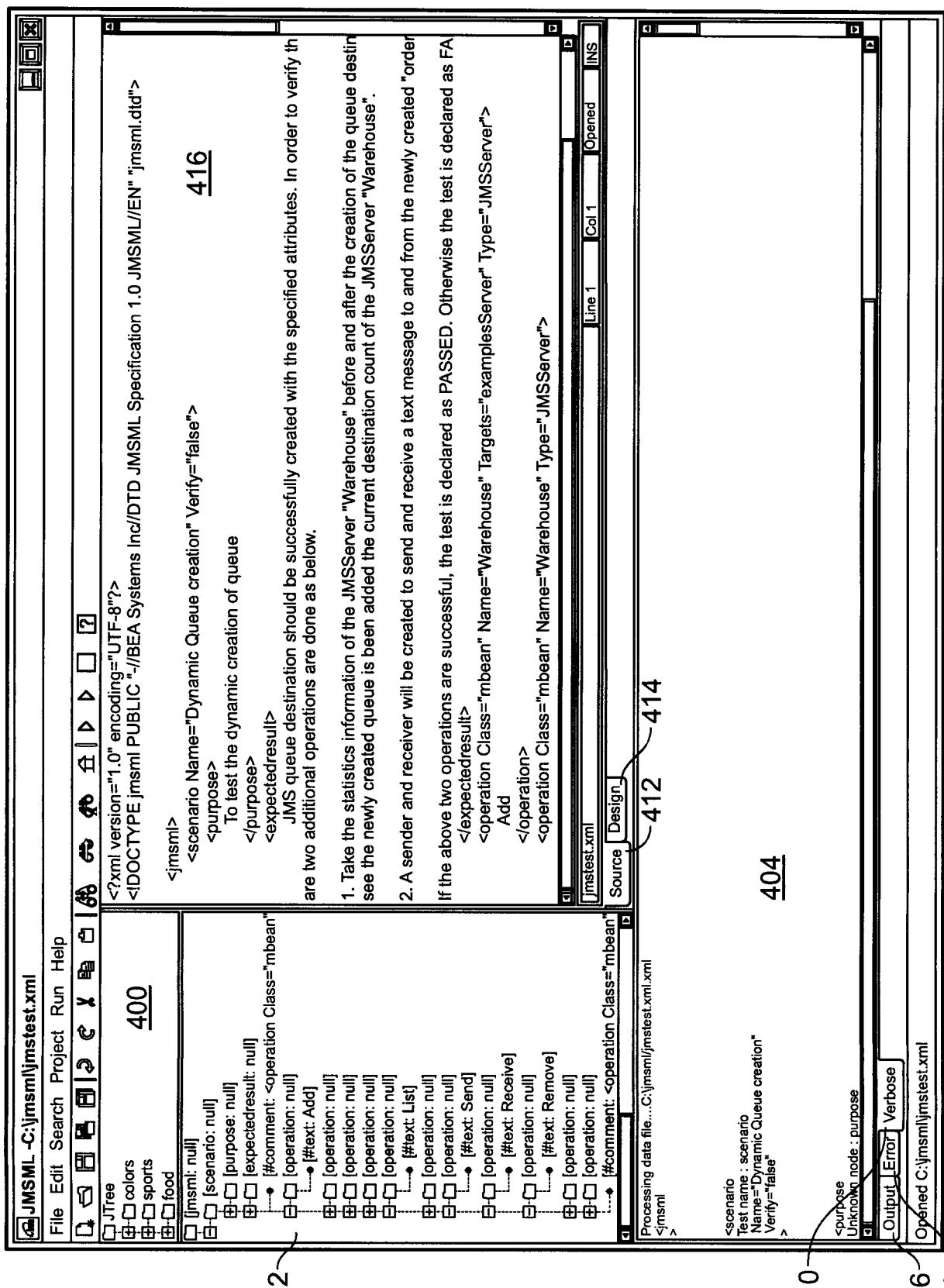FIG. 10

REPLACEMENT SHEET
Drawing Sheet 11 of 19
Title: INTEGRATED DEVELOPMENT ENVIRONMENT FOR JAVA MESSAGE SERVICE MARK-UP LANGUAGE
Inventors: Kathiravan Sengodan
Application No.: 10/602,038   Filing Date: June 23, 2003
Docket No.: BEAS-01351US4
Attorney: Karl F. Kenna   Telephone No. (415) 362-3800

JMSML -C:\jmsml\jmstest.xml

File Edit Search Project Run Help

400

JTree
colors
sports
food

[jmsml: null]
  [scenario: null]
    [purpose: null]
    [expectedresult: null]
    [#comment: <operation Class="mbean"
      [operation: null]
        [#text: Add]
      [operation: null]
      [operation: null]
      [operation: null]
      [operation: null]
        [#text: List]
      [operation: null]
      [operation: null]
        [#text: Send]
      [operation: null]
        [#text: Receive]
      [operation: null]
        [#text: Remove]
      [operation: null]
      [operation: null]
    [#comment: <operation Class="mbean"

402

<?xml version="1.0" encoding="UTF-8"?>
<!DOCTYPE jmsml PUBLIC "-//BEA Systems Inc//DTD JMSML Specification 1.0 JMSML//EN" "jmsml.dtd">

416

<jmsml>
  <scenario Name="Dynamic Queue creation" Verify="false">
    <purpose>
      To test the dynamic creation of queue
    </purpose>
    <expectedresult>
      JMS queue destination should be successfully created with the specified attributes. In order to verify th
      are two additional operations are done as below.

1. Take the statistics information of the JMSServer "Warehouse" before and after the creation of the queue destin
   see the newly created queue is been added the current destination count of the JMSServer "Warehouse".

2. A sender and receiver will be created to send and receive a text message to and from the newly created "order

If the above two operations are successful, the test is declared as PASSED. Otherwise the test is declared as FA
    </expectedresult>
    <operation Class="mbean" Name="Warehouse" Targets="examplesServer" Type="JMSServer">
      Add
    </operation>
    <operation Class="mbean" Name="Warehouse" Type="JMSServer">

jmstest.xml   Source Design

412 414

Line 1   Col 1   Opened   INS

Processing data file....C:\jmsml/jmstest.xml.xml
<jmsml
^
<scenario
Test name : scenario
Name="Dynamic Queue creation"
Verify="false"
>
<purpose
Unknown node : purpose

Output Error Verbose

Opened C:\jmsml\jmstest.xml

404

410

406
408

FIG. 11

REPLACEMENT SHEET
Drawing Sheet 12 of 19
Title: INTEGRATED DEVELOPMENT ENVIRONMENT FOR JAVA MESSAGE SERVICE MARK-UP LANGUAGE
Inventors: Kathiravan Sengodan
Application No.: 10/602,038   Filing Date: June 23, 2003
Docket No.: BEAS-01351US4
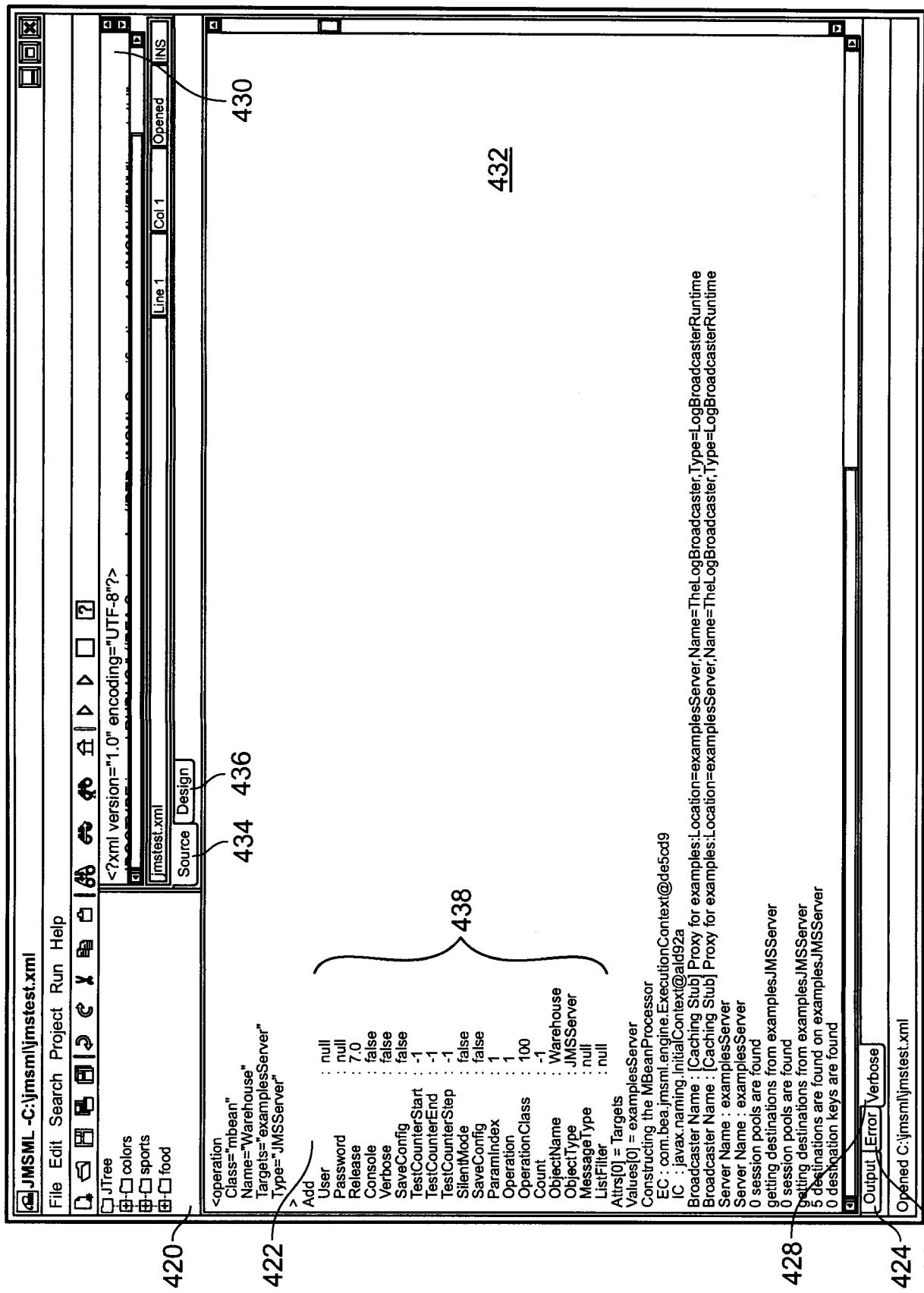Attorney: Karl F. Kenna   Telephone No. (415) 362-3800

FIG. 12

JMSML -C:\jmsml\jmstest.xml

File Edit Search Project Run Help

JTree
colors
sports
food

`<?xml version="1.0" encoding="UTF-8"?>`

jmstest.xml

Source | Design

Line 1   Col 1   Opened   INS

```
<operation
   Class="mbean"
   Name="Warehouse"
   Targets="examplesServer"
   Type="JMSServer"
>
Add
   User              : null
   Password          : null
   Release           : 7.0
   Console           : false
   Verbose           : false
   SaveConfig        : false
   TestCounterStart  : -1
   TestCounterEnd    : -1
   TestCounterStep   : -1
   SilentMode        : false
   SaveConfig        : false
   ParamIndex        : 1
   Operation         : 1
   OperationClass    : 1
   Count             : 100
   ObjectName        : -1
   ObjectType        : Warehouse
   MessageType       : JMSServer
   ListFilter        : null
                     : null
Attrs[0] = Targets
Values[0] = examplesServer
Constructing the MBeanProcessor
EC : com.bea.jmsml.engine.ExecutionContext@de5cd9
IC : javax.naming.InitialContext@ald92a
Broadcaster Name : [Caching Stub] Proxy for examples:Location=examplesServer,Name=TheLogBroadcaster,Type=LogBroadcasterRuntime
Broadcaster Name : [Caching Stub] Proxy for examples:Location=examplesServer,Name=TheLogBroadcaster,Type=LogBroadcasterRuntime
Server Name : examplesServer
Server Name : examplesServer
getting destinations from examplesJMSServer
0 session pools are found
0 session pools are found
getting destinations from examplesJMSServer
5 destinations are found on examplesJMSServer
0 destination keys are found
```

Output | Error | Verbose

Opened C:\jmsml\jmstest.xml

420 422 434 436 438 430 432 428 424 426

Title: INTEGRATED DEVELOPMENT ENVIRONMENT FOR JAVA MESSAGE SERVICE MARK-UP LANGUAGE
Inventors: Kathiravan Sengodan
Application No.: 10/602,038   Filing Date: June 23, 2003
Docket No.: BEAS-01351US4
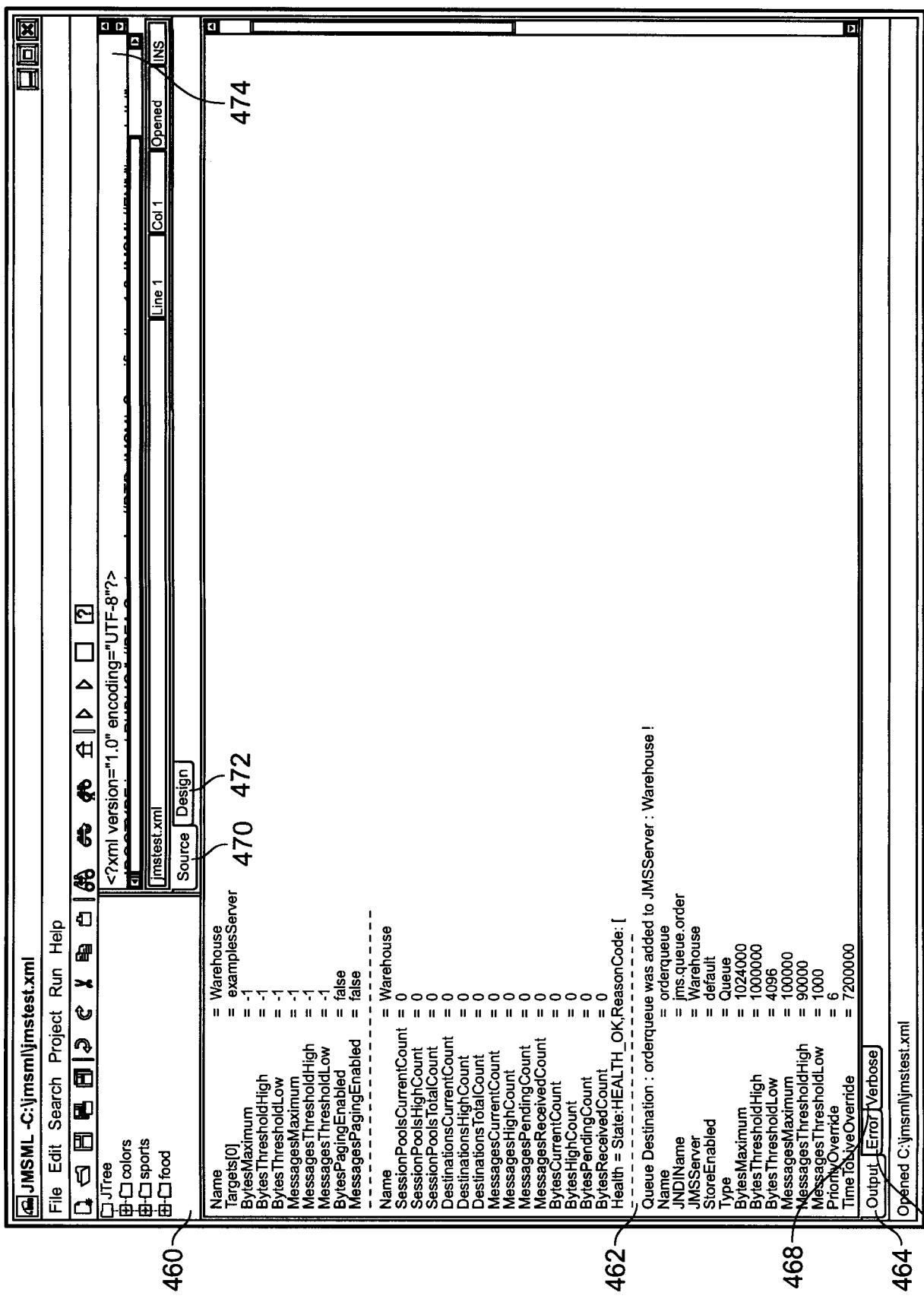Attorney: Karl F. Kenna   Telephone No. (415) 362-3800

JMSML -C:\jmsml\jmstest.xml

File   Edit   Search   Project   Run   Help

JTree
- colors
- sports
- food

[jmsml: null]
- [scenario: null]
  - [purpose: null]
  - [expectedresult: null]
  - [#comment: <operation Class="mbean"
  - [operation: null]
    - [#text: Add]
  - [operation: null]
    - [#text: List]
  - [operation: null]
    - [#text: List]
  - [operation: null]
    - [#text: Add]
  - [operation: null]
    - [#text: List]
  - [operation: null]
  - [operation: null]
  - [operation: null]
  - [operation: null]
  - [operation: null]
  - [operation: null]
  - [#comment: <operation Class="mbean"

```xml
<?xml version="1.0" encoding="UTF-8"?>
<!DOCTYPE jmsml PUBLIC "-//BEA Systems Inc//DTD JMSML Specification 1.0 JMSML//EN" "jmsml.dtd">

<jmsml>
  <scenario Name="Dynamic Queue creation" Verify="false">
    <purpose>
      To test the dynamic creation of queue
    </purpose>
    <expectedresult>
      JMS queue destination should be successfully created with the specified attributes. In order to verify th
      are two additional operations are done as below.

      1. Take the statistics information of the JMSServer "Warehouse" before and after the creation of the queue destin
         see the newly created queue is been added the current destination count of the JMSServer "Warehouse".

      2. A sender and receiver will be created to send and receive a text message to and from the newly created "orde

      If the above two operations are successful, the test is declared as PASSED. Otherwise the test is declared as FA
    </expectedresult>
    <operation Class="mbean" Name="Warehouse" Targets="examplesServer" Type="JMSServer">
      Add
    </operation>
    <operation Class="mbean" Name="Warehouse" Type="JMSServer">
      List
    </operation>
    <operation Class="mbean" Name="Warehouse" Type="JMSServerRuntime">
      List
    </operation>
    <operation BytesMaximum="1024000" BytesThresholdHigh="1000000" BytesThresholdLow="4096" Clas
      ride="Persistent" JMSServer="Warehouse" JNDIName="jms.queue.order" MessagesMaximum="00000" Mess
```

jmstest.xml
Source   Design

Line   Col   Opened   INS

okToAbandon () : DIRTY FLAG => flase

Output | Error | Verbose

Opened C:\jmsml\jmstest.xml

440   442   444   446   448   450   452   454   456

FIG. 13

REPLACEMENT SHEET
Drawing Sheet 14 of 19
Title: INTEGRATED DEVELOPMENT ENVIRONMENT FOR JAVA MESSAGE SERVICE MARK-UP LANGUAGE
Inventors: Kathiravan Sengodan
Application No.: 10/602,038   Filing Date: June 23, 2003
Docket No.: BEAS-01351US4
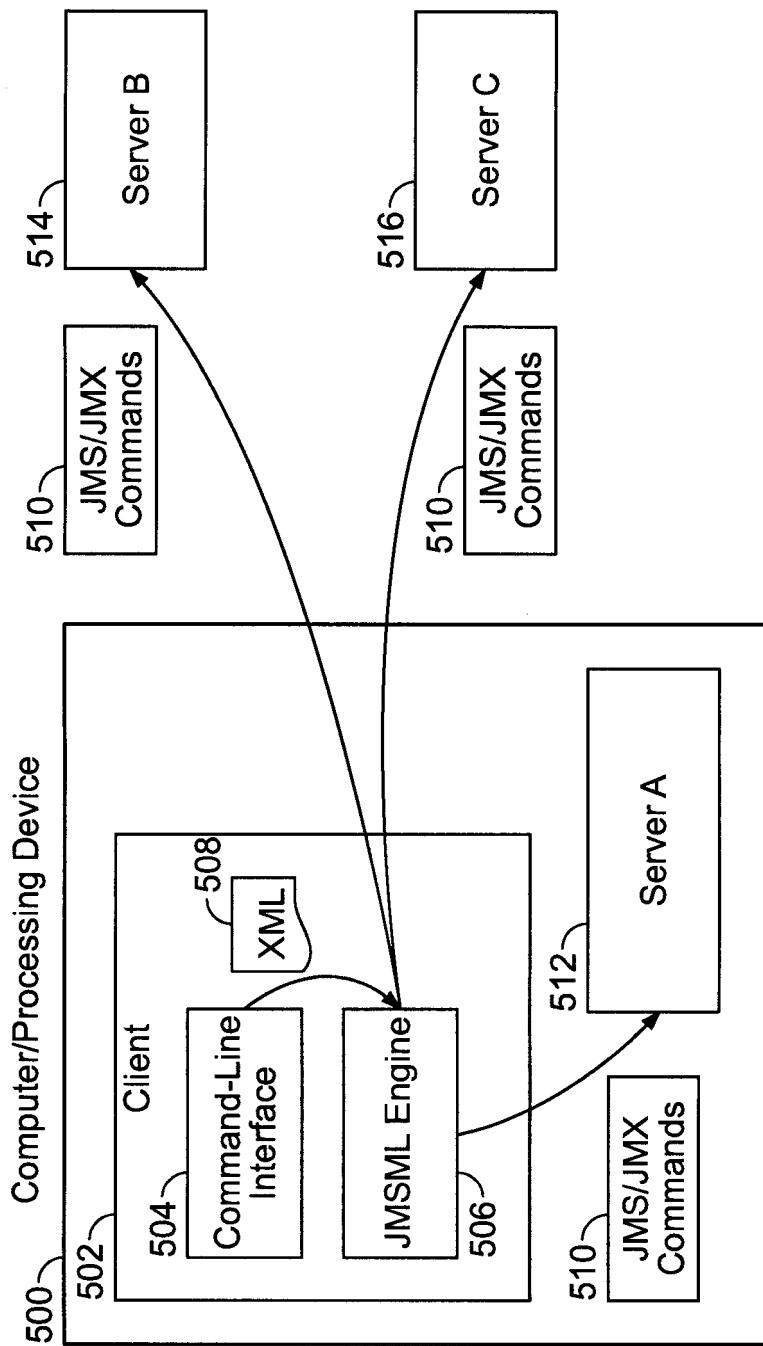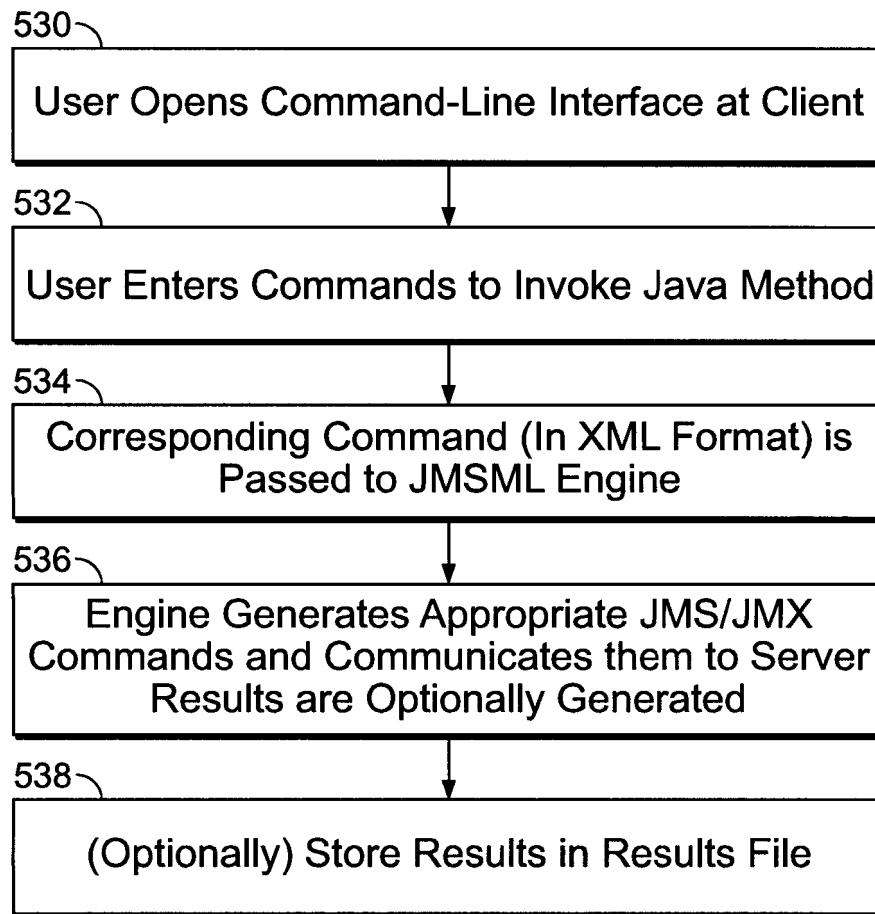Attorney: Karl F. Kenna   Telephone No. (415) 362-3800
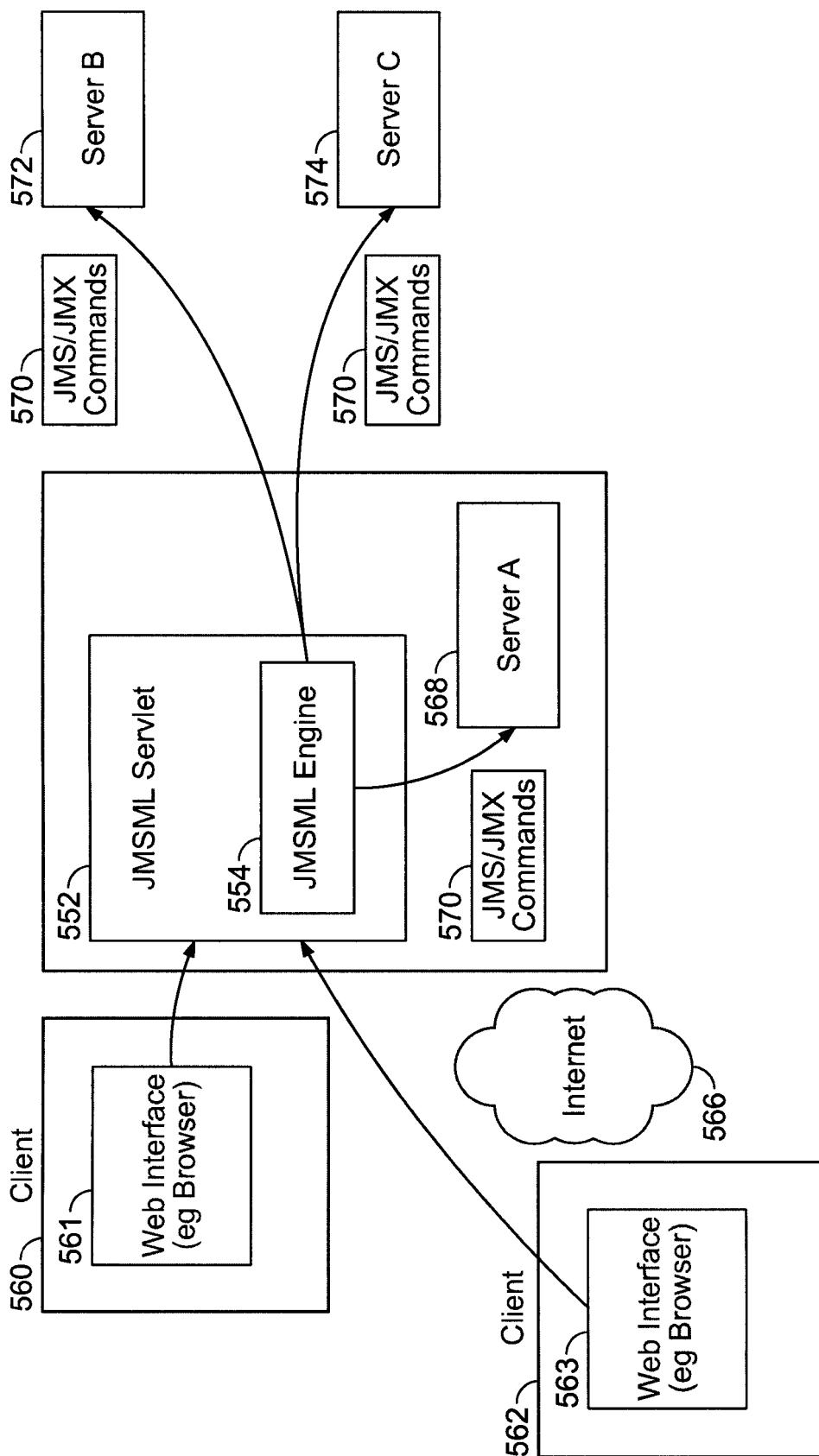
FIG. 14

REPLACEMENT SHEET
Drawing Sheet 15 of 19
Title: INTEGRATED DEVELOPMENT ENVIRONMENT FOR JAVA MESSAGE SERVICE MARK-UP LANGUAGE
Inventors: Kathiravan Sengodan
Application No.: 10/602,038   Filing Date: June 23, 2003
Docket No.: BEAS-01351US4
Attorney: Karl F. Kenna   Telephone No. (415) 362-3800

FIG. 15

530

| User Opens Command-Line Interface at Client |

532

| User Enters Commands to Invoke Java Method |

534

| Corresponding Command (In XML Format) is Passed to JMSML Engine |

536

| Engine Generates Appropriate JMS/JMX Commands and Communicates them to Server Results are Optionally Generated |

538

| (Optionally) Store Results in Results File |

FIG. 16

REPLACEMENT SHEET
Drawing Sheet 17 of 19
Title: INTEGRATED DEVELOPMENT ENVIRONMENT FOR JAVA MESSAGE SERVICE MARK-UP LANGUAGE
Inventors: Kathiravan Sengodan
Application No.: 10/602,038   Filing Date: June 23, 2003
Docket No.: BEAS-01351US4
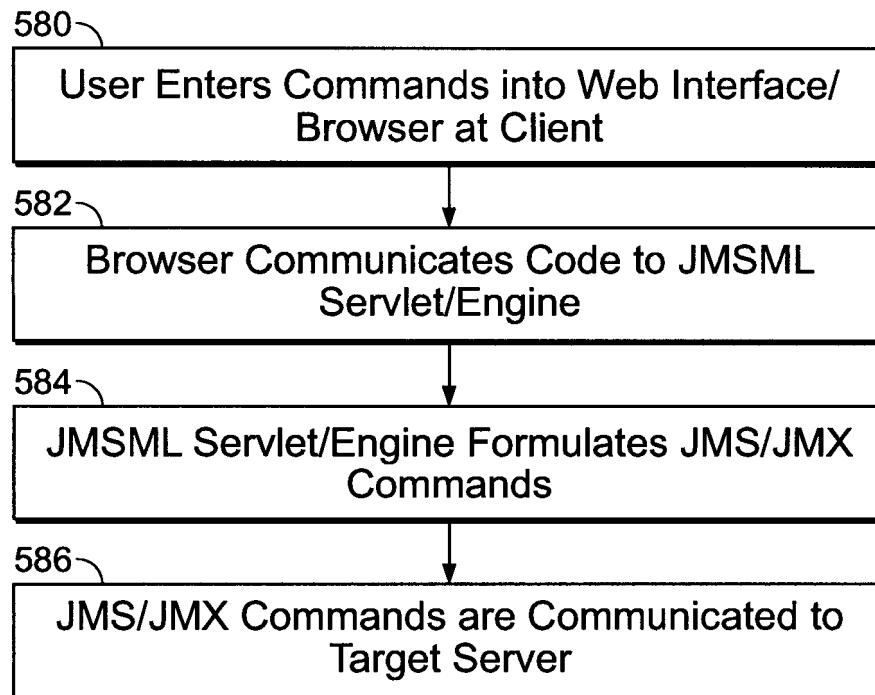Attorney: Karl F. Kenna   Telephone No. (415) 362-3800

FIG. 17

580

User Enters Commands into Web Interface/
Browser at Client

582

Browser Communicates Code to JMSML
Servlet/Engine

584

JMSML Servlet/Engine Formulates JMS/JMX
Commands

586

JMS/JMX Commands are Communicated to
Target Server

FIG. 18

REPLACEMENT SHEET
Drawing Sheet 19 of 19
Title: INTEGRATED DEVELOPMENT ENVIRONMENT FOR JAVA MESSAGE SERVICE MARK-UP LANGUAGE
Inventors: Kathiravan Sengodan
Application No.: 10/602,038   Filing Date: June 23, 2003
Docket No.: BEAS-01351US4
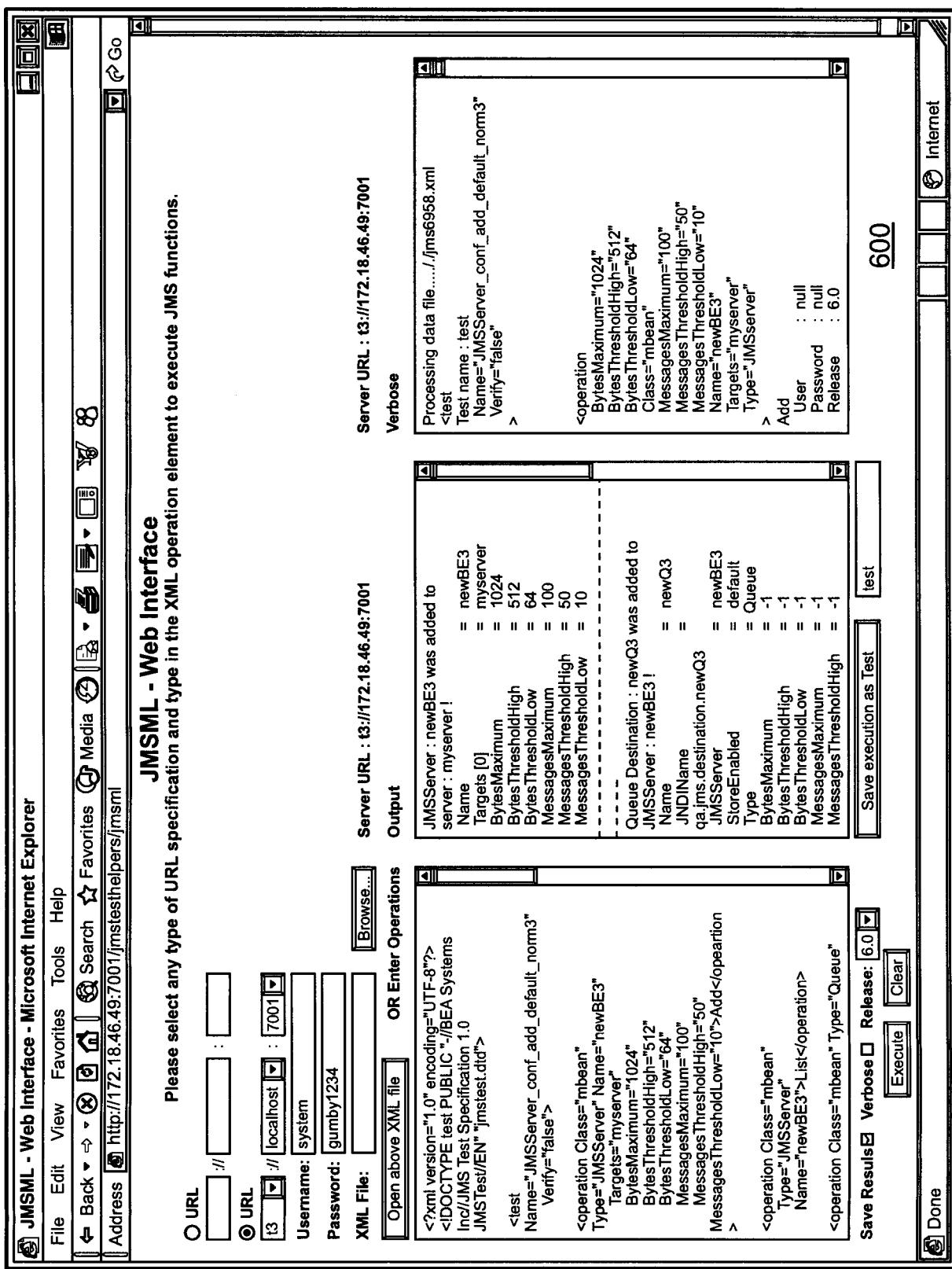Attorney: Karl F. Kenna   Telephone No. (415) 362-3800

FIG. 19